Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 6002(b) of	)	
the Omnibus Budget Reconciliation	)	
Act of 1993	)	WT Docket No. 07-71
	)	
Annual Report and Analysis of	)	
Competitive Market Conditions With	)	
Respect to Commercial Mobile Services	)	

COMMENTS OF CTIA-THE WIRELESS ASSOCIATION®

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SUMMARY

By these comments, CTIA-The Wireless Association® ("CTIA") responds to the Commission's request for information regarding the state of competition in the wireless industry for incorporation into the *Twelfth Annual CMRS Competition Report*.

Numerous sources of data continue to demonstrate that competition among facilities-based CMRS carriers and against other providers is fierce. Consumers have access to a wealth of publicly available information on carrier operations that both promote educated decision-making for consumers and push wireless providers to stay at the forefront of innovation and service reliability. In this exceedingly competitive market, carriers must differentiate themselves through network dependability and coverage as well as through deployment of new service offerings, pricing plans and unique handset options. The evidence clearly proves that output is increasing as the wireless industry continues to attract new subscribers by striving to reach the rural and underserved markets and late adopters to wireless technology, as well as meet the demand of customers hungry for advanced wireless services.

Even in a competitively robust environment, the Commission can do more to further Congress' directive to ensure competition continues to flourish. As CTIA remarked in its comments in the *Eleventh Annual CMRS Competition* docket, "The Commission has attempted to fulfill the goal of promoting competition in several post-1993 decisions regarding the regulatory treatment of CMRS services; however, it is a goal that requires governments to resist the temptation to substitute regulatory fiat for an effectively-functioning competitive marketplace." Commission action, or at times inaction, is needed on a number of issues in order to continue to promote the benefits of

the competitive wireless industry for consumers and the U.S. economy. Specifically, the wireless industry is asking the Commission to issue a Declaratory Ruling that CMRS provider early termination fees are rates subject to exclusive federal jurisdiction; to ensure that the CMRS industry has access to the spectrum it needs to roll-out new bandwidth-intensive mobile wireless broadband services, to develop non-discriminatory, market-oriented universal service and intercarrier compensation regulations; to dismiss the pending Skype Petition seeking imposition of Carterfone-type regulations on CMRS providers and an inquiry into the policy of bundling wireless customer premises equipment ("CPE") with mobile wireless services; and to otherwise avoid imposition of regulatory mandates that are better addressed by the competitive market. In both its functions and its results, the wireless industry is demonstrably competitive, and is producing great benefits for both new and existing individual and business users of traditional wireless services and new service offerings, from wireless broadband Internet access and a host of multi-media applications now offered in the U.S.

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COMMENTS OF CTIA-THE WIRELESS ASSOCIATION®

CTIA-The Wireless Association® ("CTIA")[1] hereby submits the following comments in response to the Federal Communications Commission's ("Commission" or "FCC") April 6, 2007 *Public Notice* requesting data and information regarding the state of competition in the Commercial Mobile Radio Service ("CMRS") industry, including "comment on which indicators are useful for analyzing competitive market conditions with respect to CMRS," as well as "what specific criteria should be used to determine whether there is effective competition among CMRS providers."[2]

As the Commission has recognized in numerous statements, the U.S. mobile wireless industry's long standing record of effective competition continues to prove that without the heavy hand of government intervention, constant innovation to meet

[1] CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, Advanced Wireless Service, broadband PCS, and ESMR, as well as providers and manufacturers of wireless data services and products.

[2] WTB Seeks Comment on CMRS Market Competition, *Public Notice*, WT Docket No. 07-71, DA 07-1652 (Apr. 6, 2007) (hereinafter, "Notice").

consumer demand drives the industry's success.[3] The CMRS industry attributes its evolution partly to an environment of minimal regulatory intervention that has allowed licensees to manage their spectral landscape and to maximize innovation and efficiency both in the network and in handsets at network edges. As discussed herein, the last fifteen years of a light regulatory touch at the federal level has produced remarkable results for consumers: falling prices, dramatic improvements in service quality, and the ongoing development of new services.[4] It is the consumer who ultimately benefits from the wireless industry's astonishing rate of growth and investment as existing and prospective mobile wireless providers must continue to roll-out new technologies and new service applications (such as mobile broadband Internet access, mobile TV, and other advanced services) in order to survive in the highly competitive, consumer-oriented marketplace.

Even with the promising state of the CMRS industry, there is more the Commission can do to further Congress's directive to promote competition. Indeed, with more spectrum being brought to market as a result of the upcoming auction of 60 MHz of 700 MHz spectrum, and wireless providers deploying the next generation of mobile broadband voice, data and video services at an increasing rate, it is crucial that the

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[3] *See In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, *Eleventh Report*, WT Docket No. 06-17, FCC 06-142, ¶¶ 2-5 (Sept. 29, 2006) ("*Eleventh Report*").

[4] *See Bundling of Cellular Customer Premises Equipment and Cellular Service*, Report and Order, CC Docket No. 91-34, FCC 92-207, 7 FCC Rcd 4028 (1992) ("CPE Bundling Order"); *In re: Amendment of the Commission's Rules to Establish New Personal Communications Services*, Federal Communications Comm'n, Notice of Proposed Rule Making and Tentative Decision, GEN Docket No. 90-314, ET Docket No. 92-100, 7 FCC Rcd. 5676 (1992).

Commission maintain its restraint from over-regulating an industry that is the picture of competitiveness, and commit to addressing issues that threaten to impede the sustained evolution of the wireless industry.[5]

The following Comments respond to the FCC's Notice and request for data and information to help the Commission and Congress evaluate the state of competition in the wireless industry in 2006 for its *Twelfth Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services* ("*Twelfth Report*"). These Comments also note where the Commission must act in order to continue to promote the benefits of competitive wireless services for consumers and the U.S. economy.

I. CMRS CARRIERS HAVE A HISTORY OF CONTINUING INVESTMENT IN NEW SERVICES AND EXPANDED INFRASTRUCTURE TO MEET EVOLVING CONSUMER DEMANDS

As CTIA has advocated in the past, the Commission should build its current docket based upon the FCC's historical record, consisting of eleven consecutive dockets of the Commission's repeated findings that the wireless industry is effectively competitive in both rural and urban markets.[6] While CTIA does not itself possess

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[5] *See, for example, In re* Skype Communications S.A.R.L. Petition to Confirm a Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks, COMMENTS OF CTIA-THE WIRELESS ASSOCIATION®, RM-11361 (filed Apr. 30, 2007) ("*CTIA Skype Comments*"); *In re* Petition of M2Z Networks, Inc. for Forbearance Under 47 U.S.C. § 160(c) Concerning Application of Sections 1.945(b) and (c) of the Commission's Rules and Other Regulatory and Statutory Provisions, CTIA-THE WIRELESS ASSOCIATION® OPPOSITION, WT Docket No. 07-30 (Mar. 19, 2007); CTIA-The Wireless Association®, OPPOSITION TO CYREN CALL COMMUNICATIONS CORPORATION'S PETITION FOR RECONSIDERATION, RM-11348 (Mar. 16, 2007).

[6] *See In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, COMMENTS OF CTIA-THE

carrier-specific or granular market-level information (e.g., carrier-specific marketing and build-out information, or non-aggregated penetration and usage data), CTIA welcomes this opportunity to share its observations with the Commission as to the proper context in which to analyze the mobile wireless industry's competitive performance and to highlight sources of information that help both the Commission and Congress understand the wireless industry's current state of competition.

A. Impact of Granularity of Data on Small Carriers

With regard to the Commission's request for data and comment on method(s) to evaluate service provision at geographically smaller areas than counties, granular-level information about carrier conduct and consumer behavior is burdensome to produce and competitively sensitive. The cost of collecting and compiling such information may be prohibitive, particularly for smaller wireless service providers who may need to divert limited resources to meet any such reporting requirements.[7] For that reason, CTIA continues to urge the Commission to be cognizant of the burdens placed on carriers required to commit substantial resources to the compilation and submission of data –

WIRELESS ASSOCIATION®, WT Docket No. 06-17 at 3-4 (Feb. 17, 2006) ("*CTIA 2006 Competition Comments*").

[7] As Terry Addington, former Chairman of the CTIA Board of Directors, observed: "Our website gives you all of our pricing. It gives all of our services. . . . but revenue [is] very, very sensitive, net income very sensitive. . . . I do want to work with you on your desire for information, but . . . . I don't need it to be something that becomes more important than the customer." Statement of Terry Addington, CEO, First Cellular of Southern Illinois, at Federal Communications Commission Public Hearing for 7th Annual CMRS Competition Report, February 28, 2002. *See Transcript at* http://wireless.fcc.gov/services/cmrs/presentations/020228.pdf, at 111-112.

including data that is otherwise readily accessible on industry websites, press releases, and from third-party sources.[8]

B. Rural Markets

Publicly available data and aggregated industry data reveal that the wireless industry strives to reach consumers in both urban and rural, underserved regions of the country. CTIA estimates that the wireless penetration rate of urban populations is approximately 75%. The wireless penetration rate of the population in rural areas is not far behind – at approximately 68%.[9] Through the help of universal service funds, mobile wireless providers across the country – including carriers in rural markets – are investing in expanding network capacity to deliver voice and advanced wireless services to consumers in rural areas and tribal lands. On the Pine Ridge Indian Reservation in South Dakota, Alltel has used universal service funding to increase telephone penetration rates from 27% to 92% in only five years. Cellular South serves 380,000 square miles of rural territory in Mississippi and is using high-cost support to significantly expand its network capacity. Centennial Wireless has brought mobile wireless services to communities, such as Shaw and Blackhawk, Louisiana, that previously had no telephone service at all, wireline or wireless.

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[8] *See In re* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, COMMENTS OF THE CELLULAR TELECOMMUNICATIONS & INTERNET ASSOCIATION, WT Docket No. 05-71, at 2-3 filed (Mar. 28, 2005) ("*CTIA 2005 Competition Comments*").

[9] The Economic Area table in the *Eleventh Competition Report* includes the population density of each Economic Area. When the penetration is calculated for EA's with a population density of less than 100 persons per square mile (the current FCC definition of "rural"), a 68% penetration rate is found. It is noteworthy that even when a more conservative estimate is applied, (25 persons per square mile) the penetration rate remains consistent, at approximately 67%.

Even with more mobile wireless subscribers than wireline switched access lines, wireless carriers receive only about 15% of universal service support overall and less than 23% of high-cost universal service support as of 2006.[10] Universal service distributions remain primarily directed to incumbent wireline carriers, despite the steady rise of consumer demand for mobile wireless services over the last decade. Although much of the wireless industry's growth transpired without the benefit of universal service subsidies, universal service can and does play a critical role in improving access to wireless services in high-cost, rural areas.

Universal Service Funds help Nex-Tech Wireless cover the rural area of Northwest Kansas where the population is sparse, totaling fewer than 175,000 households. Wireless services are particularly vital to smaller communities, such as those in Northwest Kansas, by providing emergency mobile communications in cases of natural disasters. Thanks to the wireless service provided by Nex-Tech Wireless, several farms in Cheyenne County, Kansas were able to keep communications lines open after tornados completely destroyed several farms in early April. Homeowners were able to call 911 and remain in contact with family and friends. CTIA recommends that the Commission look to the experience of the wireless industry as a guide to demonstrate that simplified regulations that encourage and reward efficiency will best benefit consumers by ensuring

[10] CTIA's calculations are based on figures provided by the Universal Service Administrative Company in its 2006 Annual Report; *See* Universal Service Administrative Company 2006 Annual Report at p. 43, 45, *available at* *http://www.universalservice.org/_res/documents/about/pdf/usac-annual-report-2006.pdf*.

that universal service is targeted only to where it is most needed and is not more than is necessary.[11]

C. Sources for Consumer Information

Consumers have access to a wealth of publicly available information on carrier operations. With respect to coverage maps requested by the Commission in the Public Notice, service providers increasingly offer greater interactivity and user-friendly coverage maps via their websites.[12] Wireless providers employ companies, such as American Roamer, that aid in keeping track of carriers' expanding networks and provide enhanced mapping solutions, including geographic area analysis and wireless coverage comparisons.[13] Some carrier websites have the ability to pinpoint coverage area on a granular level utilizing street address, zip codes and longitudinal and latitudinal coordinates. For example, a consumer interested in service by T-Mobile USA may preview signal strength in any given region, by searching by address or by intersection.[14] This capability allows the consumer to make an informed decision prior to entering into a service agreement as well as predict wireless coverage in preparation for travel. An

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[11] *See* WRITTEN TESTIMONY OF PAUL W. GARNETT, ASSISTANT VICE PRESIDENT, REGULATORY AFFAIRS, CTIA-THE WIRELESS ASSOCIATION® BEFORE THE UNITED STATES HOUSE OF REPRESENTATIVES, COMMITTEE ON ENERGY AND COMMERCE (June 21, 2006).

[12] *See, e.g.*, Alltel *at* http://www.alltel.com/business/enhanced/mobilelink_coverage.jsp?state=nat; AT&T Mobility (formerly Cingular Wireless) *at* www.cingular.com/coverageviewer; Sprint *at* http://coverage.sprintpcs.com/IMPACT.jsp; Nextel *at* http://www.nextel.com/en/coverage/index.shtml; U.S. Cellular *at* http://www.uscc.com/uscellular/SilverStream/Pages/x_page.html?p=map_home.

[13] *See* American Roamer *at* http://www.americanroamer.com/.

[14] *See* T-Mobile *at* http://www.t-mobile.com/coverage/.

AT&T customer planning a trip abroad may check voice and data coverage based on specific wireless device and travel itinerary, including international roaming per minute rates.[15] As competitors to facilities-based terrestrial CMRS providers, Mobile Virtual Network Operators ("MVNOs") also provide comprehensive on-line coverage maps that not only show voice but also data service availability. Helio, an MVNO which launched its youth inspired service in May 2006, acquaints subscribers with its "Send Stuff Zones" based on zip code, which shows optimal locations for utilizing Helio's 3G high-speed services, such as accessing MySpace and other data sharing and downloading applications.[16]

Multiple independent sources are available to individuals interested in gaining inside knowledge on the wireless marketplace. Many websites offer reviews of both carriers and handsets, including discussion forums and data on service issues and coverage (i.e., maps and market lists). For example, mobile phone shoppers and users can find comprehensive information on handsets via websites like www.Phonescoop.com. Other avenues for consumer information that compare wireless carriers and provide ratings and grades on performance are ConsumerReports.org, JDPower.com, MountainWireless.com, cnet.com, wirelessadvisor.com, evdoinfo.com, evdoforum.com, and sprintusers.com, to name a few. A number of these websites permit consumers to compare service plans, devices, and quality of service – including not only the websites of service providers themselves, but also such third-party retailers (e.g.

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15 *See* International Calling with Cingular World *at* http://www.cingular.com/learn/international/?_requestid=148567.

16 *See* Helio Get Covered *at* http://www.helio.com/page?p=coverage_map.

CompareWirelessPhones.com, www.Consumersearch.com, LetsTalk.com, MyRatePlan.com, and a host of others).[17]

With so many service providers and individual carrier handset offerings to choose from, access to an unprecedented amount of information helps consumers evaluate service and equipment. Countless sites, including both CTIA.org and the FCC.gov, educate consumers on factors such as coverage, cost, service options, and customer care.[18] These and other sites include information to help consumers make informed decisions.[19] Conversely, those who are either unhappy with their carriers' offerings or are interested in another carriers' services can research whether to make the switch to an alternative carrier, and can do so, with relative ease – potentially by porting their existing wireless number to their provider of choice.[20] Since the inception of telephone number

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[17] *See* http://www.comparewirelessphones.com/, www.letstalk.com, www.myrateplan.com, http://www.wirelessguide.org/index.php, and http://www.wirelessadvisor.com/.

[18] *See*, *e.g.*, http://reviews.cnet.com/Cell_phones/2001-3504_7-0.html?tag=cnetfd.dir (CNET page with links to wireless product reviews and stories), http://www.comparewirelessphones.com/compare_plans.aspx (including coverage, cost and service options, and customer care), *see also* http://www.comparewirelessphones.com/compare_plans.aspx (including plan features and cost), and http://www.myrateplan.com/wireless_plans/ (filter permitting comparison of plans across service providers).

[19] *See* http://www.ctia.org/consumer_info/service/ (providing links to information about selecting service, and explaining industry terms), http://reviews.cnet.com/Wireless/4520-7609_7-5537615-1.html?tag=dir (CNET page, with links to multiple CNET resources for consumers), http://www.myrateplan.com/cell_phone_buying_guide/ (including guidance for selecting wireless devices or services), http://wsf4.letstalk.com/ (main page, including links to user reviews), and http://www.comparewirelessphones.com/wireless101.aspx.

[20] One web-based provider, Cellswapper.com, shows consumers how easily they can swap out old contracts or swap into a new short term contract without incurring any early termination fees, as the site claims; *see* cellswapper *at* http://www.cellswapper.com/.

portability in 2003, over 25 million mobile to mobile ports have occurred.[21] With porting as a common option for consumers, it's even more critical that wireless carriers compete to offer superior service, the latest trends, and at the lowest prices possible.[22]

II. FOR THE BENEFIT OF CONSUMERS, COMPETITION AMONG TERRESTRIAL FACILITIES-BASED CMRS PROVIDERS AND AGAINST OTHER PROVIDERS IS THRIVING

Competition among facilities-based wireless carriers is fierce with the industry comprised of more than 150 providers.[23] There are currently four carriers that compete

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[21] *See* Wireline Competition Bureau, Industry Analysis and Technology Division, TRENDS IN TELEPHONE SERVICE at Table 8.8 (Feb. 2007). Also, noting the more than 1.8 million landline to mobile ports, since the start of number porting in November 2003.

[22] *See CTIA Skype Comments*, Attachment F at p. 6, George S. Ford, Ph.D., Thomas M. Koutsky, J.D., Lawrence J. Spiwak, J.D., PHOENIX CENTER POLICY BULLETIN NO. 17, observing that "in today's wireless industry, carriers are obviously not monopolists, and the Commission acknowledges that [wireless providers] compete aggressively on service quality, features, and prices."

[23] *See CTIA Skype Comments* at 5-8, listing facilities-based licensees, which include the following providers: Aeronautical Radio Inc. (ARINC), Airadigm / Einstein PCS, Airpeak (Nevada Wireless), Airtel Montana, Alaska Communications / ACS Wireless, Alaska Digitel, Alaska Wireless, All West Communications / All West Wireless, Alltel Wireless, American Samoa Telecommunications Authority, American Wireless License Group, AmeriLink PCS / Choice Wireless, Appalachian Wireless / East Kentucky Cellular Network, Arctic Slope Cellular (ASTAC), AT&T Mobility, Baldwin Nashville Telephone Company, Benton Linn Wireless, Blanca Telephone Company, Blue Sky Communications / American Samoa License Inc., Bluegrass Cellular, Brazos Cellular, Bristol Bay Cellular Partnership, C.C. Communications – Cellular Caprock Cellular, Carolina West Wireless, Cascade Communications, CellCom / Northeast Communications of Wisconsin, Cellular 29 Plus, Cellular One of East Texas, Cellular One of Elkins WV / Douglas Telecommunications / Easterbrooke Telecom., Cellular One of NE Arizona / Smith Bagley, Cellular One of NE Pennsylvania / South Canaan Cellular, Cellular One of San Luis Obispo, CA / Entertainment Unlimited, Cellular Properties Inc. dba Cellular One of East Central Illinois, Cellular South, Centennial Communications, Chariton Valley Wireless Services, Chinook Wireless, Cincinnati Bell Wireless, ClearTalk / NTCH / GLH Communications, Coastel Communications Company, Commnet Wireless, Community Digital Wireless, ComScape / Kiwi PCS, Copper Valley Wireless, Cordova Wireless, Corr Wireless Communications, Cross-Valliant Cellular Partnership, CTC Wireless / CT

nationally for wireless subscribers, five regional carriers and more than 140 carriers that

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Communications, Custer Telephone Company, Danville Mutual Telephone Company, Dobson Cellular Systems, DoCoMo Guam / SaipanCell / Guam Wireless / Hafatel, DTC Communications formerly Advantage Cellular / DeKalb Telephone Cooperative, Dumont Telephone Company, Edge Wireless, EPIC PCS, Etex Cellular, Extend America, Farmers Mutual Cooperative Telephone Company of Harlan, IA, Farmers Wireless / Farmers Cellular Telephone, Filer Mutual Telephone Company, Five Star Wireless / Texas RSA 15B2 Partnership, GCI Cellular, Golden State Cellular, GTE Pacifica / Pacific Telecommunications, Guam Telephone Authority / TeleGuam Holdings / Pulse Mobile, Hargray Communications, Illinois Valley Cellular, Immix Wireless / Keystone Wireless, Indigo Wireless of Pennsylvania and Nebraska, Innovative Wireless (formerly Vitel Cellular of the U.S. Virgin Islands), iPCS Wireless / Illinois PCS, IT&E Wireless, i-wireless / Iowa Wireless, Lamar County Cellular, LaMotte Telephone Company, Leaco Wireless, Leap Wireless / Cricket, Long Lines Wireless, Lyrix Wireless / Iowa RSA No. 2, MBO Wireless / Cross Telco / Sprocket PCS, Metro PCS, Micronesia Telecommunications / FSM Telecommunications Corp, Mid-Rivers Communications, Mid-Tex Cellular, Mobi PCS, Mobile Satellite Ventures, Mohave Wireless / Citizens Mohave, MoviStar of Puerto Rico, MTA Wireless / Matanuska Telephone Association, NEP Wireless / The North-Eastern Pennsylvania Telephone Company, Nex-Tech Wireless, Northern PCS , Northwest Missouri Cellular, NTELOS, Ogden Telephone Company, Oklahoma Western Telephone Company, Olin Telephone Company, Omnitel Communications, Onslow Telephone Company, OTZ Telephone Coop., Pace Communications / Kaplan Telephone Co., Pacificom Holdings, Panhandle Telecommunications (PTSI), Peoples Telephone Cooperative. / Peoples Wireless, Petroleum Communications Inc. / PetroCom, Pine Belt Cellular / Pine Belt Wireless, Pine Cellular Phones / Pine Telephone Company, Pinpoint Digital Phone Service, Pioneer / Enid Cellular, Plateau Wireless / ENMR, Pocket Communications, Proxtel Wireless / North Sight Communications, PVT Wireless / Penasco Valley Telecom, Radcliffe Telephone Company, Ramcell dba Cellular Phone of Kentucky, Revol Wireless / Cleveland Unlimited, Rockwell Cooperative Telephone Association, Sagebrush Cellular, Sharon Telephone Company, Shenandoah Personal Communications Company, Silver Star PCS aka Gold Star Communications, Simmetry Communications, Snake River PCS, South Central Utah Telephone Association / South Central Communications, South Slope Cooperative Telephone Association / South Slope Wireless, Southern LINC Wireless, Sprint Nextel, SRT Wireless / Souris River Telephone, SunCom, SureWest Wireless, Swiftel / Brookings Municipal Utilities, Taylor Telecommunications, Telemetrix / Tracy Corporation, Thumb Cellular / Agri-Valley Communications, T-Mobile USA, Triangle Telephone Company / Montana Communications, U.S. Cellular Corporation, Uintah Basin Electronic Telecommunications / UBET Wireless, Unicel / Rural Cellular Corporation, Unicom (of Alaska), Union Telephone / Union Cellular, United Telephone Association / United Wireless, Van Buren Telephone, Verizon Wireless, Viaero Wireless, Wellman Cooperative Telephone Association, West Central Wireless / CT Cube, WestLink Communications of Kansas, Wilkes Cellular, Winnebago Cooperative Telephone Association, and XIT Wireless / XIT Communications.

compete in smaller markets. These entities and more battle to serve the more than 230 million U.S. mobile wireless subscribers at a penetration rate of more than 76% of the total U.S. population.[24] Competition among providers is underscored by the nearly 1,100 exhibitors hosted at CTIA's most recent convention.[25] Further evidence of the competitiveness of the wireless marketplace is the fact that as the number of wireless subscribers and their use of wireless service continues to grow, prices continue to fall.[26]

Even in an environment of diverse market players, the Commission has widened the door to opportunity as three additional carriers won national licenses in the AWS-1 auction, and as the Commission is preparing to auction additional spectrum in the 700 MHz auction.[27] New entrants have unprecedented access to the spectrum they need both

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[24] CTIA estimates 233 million U.S. subscribers at year-end 2006, a 12% increase in from year-end 2005 of 207.9 million subscribers; *See* CTIA.ORG, YEAR-END 2006 ESTIMATED WIRELESS SUBSCRIBERS UP MORE THAN 25 MILLION FROM DECEMBER 2005, http://files.ctia.org/pdf/CTIA_Survey_Year_End_2006_Graphics.pdf; WIRELESS QUICK FACTS DECEMBER 2006, *at* http://www.ctia.org/advocacy/research/index.cfm/AID/10323 (accessed May 3, 2007).

[25] *See* KVUE.COM, VIDEO, LOCATION TRACKING GET TOP BILLING AT WIRELESS SHOW, *at* http://www.kvue.com/news/top/stories/032707kvuewireless-cb.75d88cc.html (Mar. 27, 2007); CTIA.ORG, INTERNATIONAL CTIA WIRELESS 2007® OPENS IN ORLANDO, *at* http://www.ctia.org/media/press/body.cfm/prid/1679 (Mar. 27, 2007).

[26] As Verizon Wireless observed, "In 2005, the number of mobile phone subscribers increased from 184.7 million to 213 million [in 2006], with average minutes of use per subscriber per month rising to 740 minutes in the second half of 2005 from 584 minutes in 2004. Even with more customers and usage, wireless revenue per minute fell 22 percent in 2005, from $0.09 in 2004 to $0.07 in 2005." *See* Comments of Verizon Wireless, *In re* Skype Communications S.A.R.L. Petition to Confirm a Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks, RM-11361 at 8 (filed Apr. 30, 2007) ("*Verizon Wireless Skype Comments*").

[27] *See* AUCTION OF ADVANCED WIRELESS SERVICES LICENSES CLOSES, PUBLIC NOTICE, DA 06-1882 (Sept. 20, 2006); *In re* Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *et. al*, FCC 07-72, 06-150, 96-86, 01-309, 03-264, 06-169, 06-229, 94-102 (April 27, 2007).

through the auction process and through spectrum leasing arrangements with existing facilities-based carriers.

A. Competition from Resale Providers

Today's wireless customer base covers a broad demographic spectrum. With 76% of the U.S. population subscribing to mobile service, network operators are now seeking alternative avenues to reach consumers.[28] Mobile Virtual Network Operators ("MVNOs") present even more competition to traditional facilities-based carriers. MVNOs target niche markets by packaging resold airtime with demographic-specific content and features. The number of consumers served by resale as of mid-2006 was reported by the FCC's *Local Telephone Competition* report to amount to 7% of all reported wireless subscribers.[29] Since 2002, MVNO subscribership increased considerably from 6.4 to 15.2 million.[30]

MVNOs operating in the wireless marketplace include: Amp'd, Beyond Wireless / Cbeyond, DEXA Wireless, Disney Mobile, Excel Wireless, Firefly Mobile, Helio, kajeet, Jitterbug, Liberty Wireless, Movida, Qwest, Tracfone, TuYo Mobile, Working Assets Wireless, and Virgin Mobile USA, as well as a host of smaller MVNOs.[31] MVNOs have experimented with developing brands and images to attract specific

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[28] *See supra* note 21.

[29] *See* LOCAL TELEPHONE COMPETITION: STATUS AS OF JUNE 30, 2006, at Table 14 *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-270133A1.pdf (rel. Jan. 31, 2007).

[30] *See id.* Seven percent of the FCC's reported 217.4 million wireless subscribers would equal 15.2 million.

[31] *See generally* Thomas Winter Aabo, US MOBILE VIRTUAL NETWORK OPERATORS 2007: THE DEFINITIVE GUIDE AND CRITICAL ANALYSIS OF THE US MVNO MARKET, Mind Commerce (March 2007).

demographic groups. Disney Mobile and kajeet both sought to develop family-friendly services.[32] Other MVNOs target more tech-savvy populations, or older demographic groups, as well as ethnic communities.[33] MVNOs distinguish themselves via content, but like facilities-based providers, they experiment with a number of business models, such as pre-paid and unlimited plans, some even provide ways for customers to support their favorite charity through monthly usage while receiving information about the cause.[34]

B. Wireless – Wireline Competition

Increasingly, wireless is considered to be a complete substitute for wireline services as consumers opt to be wireless only. In the past, data on wireless-only consumers has been available from a number of sources. Demographic information or profiles of wireless-only consumers have been tracked or produced by analysts at

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[32] *See* Kelly Hill, DANIEL NEAL, RCR Wireless News at p.8 (April 2, 2007), (interview with Daniel Neal, CEO of kajeet). *See also* http://disneymobile.go.com/disneymobile/aboutUs.do and http://disneymobile.go.com/disneymobile/browseShop.do?method=browseHandset.

[33] *See* http://www.helio.com/; and HELIO DRIVE HAS ARRIVED: EXCLUSIVE SAMSUNG DEVICE DEBUTS GPS-ENABLED GOOGLE MAPS™ FOR MOBILE AND BUDDY BEACON, *at* http://www.helio.com/page?p=press_release_detail&contentid=1163038493005; and *see* http://gojitterbug.com/index.html (Nov. 9, 2006). *See also* http://www.movidacelular.com/movida_english/2movida.html. Other Hispanic-oriented MVNOs include Viva Liberty and Dexa Wireless. *See* http://www.vivaliberty.com/ and Dexa Wireless' site http://www.vacontigo.com/.

[34] *See* Colin Gibbs, MORE THAN AN MVNO? AMP'D CONTINUES MOBILE CONTENT PUSH, RCR Wireless News, *at* p.9; Kelly Hill (Feb. 12, 2007), HELIO HOPES TO COUNT 250,000 CUSTOMERS BY END OF THIS YEAR: LAUNCHES MUSIC SERVICE TO FUEL GROWTH, RCR Wireless News, *at* p.5 (Feb. 12, 2007); Call4Care *at* http://www.call4care.us/ (offering 1 cent per minute is donated to charity). *See also* Kelly Hill, STUDY: MVNOS APPEALING OUTSIDE OF TARGET DEMOGRAPHICS, RCR Wireless News, at p.6 (Jan. 29, 2007), and Kelly Hill, MVNOS TEST VARIETY OF BIZ MODELS, RCR Wireless News, at p.1 (Feb. 19, 2007).

Forrester Research, In-Stat, and The Yankee Group.[35] In January 2007, the National Center for Health Statistics (NCHS) released the preliminary results of the 2006 National Health Interview Survey, finding that as of the first six months of 2006 "approximately 10.5 percent of households do not have a traditional landline telephone, but do have at least one wireless telephone," by contrast with six percent as of the beginning of 2005.[36] Two percent of households reportedly had no phone service. As the following graphic demonstrates, the NCHS report estimates that 9.6% of adults and 8.6% of children lived in households with only wireless phone service as of January – June 2006, by contrast with 2.9% and 2.8%, respectively, as of January – June 2003. The text appearing at the Center for Disease Control and Prevention website includes some demographic and regional data on the populations in wireless-only households.[37]

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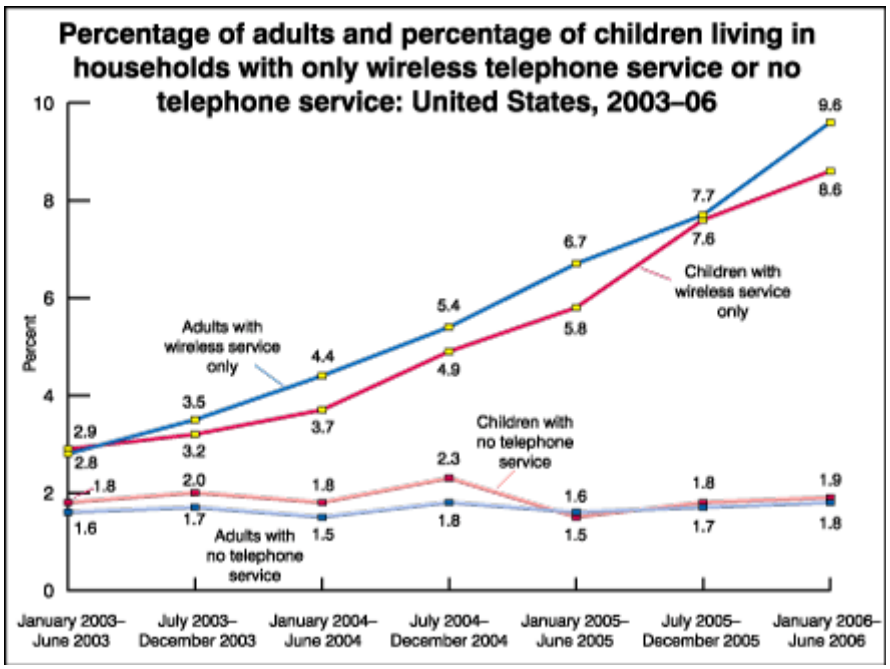
[35] Charles S. Golvin of Forrester has produced a series of reports on cord-cutting in the U.S. *See* Charles S. Golvin, CORD-CUTTING GROWS INTO THE US MAINSTREAM, BUT CANADIANS ARE MUCH MORE RELUCTANT TO GIVE UP THEIR HOME PHONE, Forrester (Mar. 30, 2006); and Charles S. Golvin, CORD-CUTTING REACHES ONE IN 20 MOBILE HOUSEHOLDS, Forrester (May 5, 2005). *See also* David Chamberlain, Jill Meyers, PROFILES OF WIRELESS-ONLY MOBILE USERS: THE CORD CUTTERS, In-Stat (Nov. 6, 2006) (including survey demographics, usage and preference data). The Yankee Group annually forecasts wireless substitution, with a Dec. 6, 2006 report by Andy Castonguay projecting ONE IN SEVEN US HOUSEHOLDS WILL SAY "NO THANKS" TO WIRELINE PHONE SERVICES IN 2010 *at* http://www.yankeegroup.com/analystBiography.do?id=705483B572BE4A58 (accessed May 2, 2007).

[36] Stephen J. Blumberg and Julian V. Luke, WIRELESS SUBSTITUTION: PRELIMINARY DATA FROM THE 2006 NATIONAL HEALTH INTERVIEW SURVEY, National Center for Health Statistics, Center for Disease Control and Prevention *at* http://www.cdc.gov/nchs/products/pubs/pubd/hestats/wireless2006/wireless2006.htm.

[37] *Id*; noting age, marital status, income and geographic distribution of wireless-only households.



Additionally, the independent market-research firm, Telephia, has produced market-specific estimates of cord-cutting.[38]

III. CARRIERS DIFFERENTIATE THEMSELVES THROUGH NETWORK RELIABILITY AND REACH AS WELL AS THROUGH SERVICE OFFERINGS, PRICING PLANS AND UNIQUE HANDSET OFFERINGS

Wireless service providers devote much of their resources to enhancing their networks to deliver the latest technology and provide superior network reliability. A recent J.D. Power and Associates Report found that as usage has continuously increased and the number of new data-centric service options grows, wireless customers find call performance and network reliability vitally important to meeting their demand for

[38] *See, e.g.*, MIDWESTERNERS CUT THE CORD: HOUSEHOLDS IN DETROIT AND MINNEAPOLIS-ST. PAUL HAVE THE HIGHEST RATE OF WIRELESS SUBSTITUTION AMONG 20 LARGEST U.S. CITIES, Telephia *at* http://www.telephia.com/html/documents/TotalCommunications_000.pdf (Oct. 18, 2006).

consistent quality connections.[39] For this reason, the U.S. mobile wireless industry has invested more than $214 billion over the last 15 years to expand and improve wireless services for consumers.[40] The companies which responded to CTIA's semi-annual wireless industry survey reported $24.4 billion in incremental capital investment in 2006, excluding investment allocated for spectrum, whether acquired at auction or via acquisition of another company. Based on CTIA's survey results, wireless companies have invested more than $20 billion per year over the past few years. As a result of these substantial investments to improving network quality, customer satisfaction has increased as the number of reported wireless problems has reached a historically low level.[41] Recent studies show the overall rate of customers experiencing a wireless call quality problem has declined for a third consecutive reporting period, thus demonstrating the great strides wireless providers have made in improving call quality.[42]

A. Mobile Data and Broadband Deployment

CTIA is particularly proud of the success of mobile service providers in the broadband marketplace. Thanks to the Commission's pro-competition broadband policy,

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39 *See* CALL QUALITY PLAYS AND INCREASINGLY IMPORTANT ROLE IN CUSTOMER SATISFACTION WITH THE WIRELESS PHONE EXPERIENCE, J.D. Power and Associates Press Release (Apr. 19, 2007).

40 *See* Forthcoming CTIA Industry Indices Report, Year-End 2006, *available for purchase at* http://www.ctia.org/store/producttyperesults.cfm?group_id=1; *see CTIA Skype Comments*, Attachment E at 34, Robert W. Hahn, Robert E. Litan, Hal J. Singer, THE ECONOMICS OF "WIRELESS NET NEUTRALITY, (Apr. 2007), observing "there is little reason to believe that suppliers will not respond to consumer demand…Wireless operators have strong incentives to attract new customers and please their current customers. One of the ways to do this is by offering the latest technology."

41 *See* Wireless Call Quality Problems Continue to Decline as the Transition to 3G Networks Takes Hold, J.D. Power and Associates Press Release (Mar. 15, 2007)

42 *Id.*

there is more facilities-based broadband competition in the U.S. than in any other country. As a result, U.S. consumers have a bevy of broadband access choices.[43] While consumers have the option of choosing from a number of broadband access providers that include not only wireless but also cable, traditional telephone, Power Line and other providers, the Commission's most recent study shows *mobile wireless* broadband additions driving the growth of high speed lines overall. Specifically, the Commission's report on *High-Speed Services for Internet Access: Status as of June 30, 2006* found that while total broadband lines grew 26% from December 2005 to June 2006, almost 60% of all new high-speed lines reported during the same period were mobile broadband wireless lines.[44] The following graph illustrates how wireless broadband additions from December 2005 to June 2006 outpace the additions for cable companies and traditional telephone companies combined both in total numbers and as a percentage of all broadband additions.[45]

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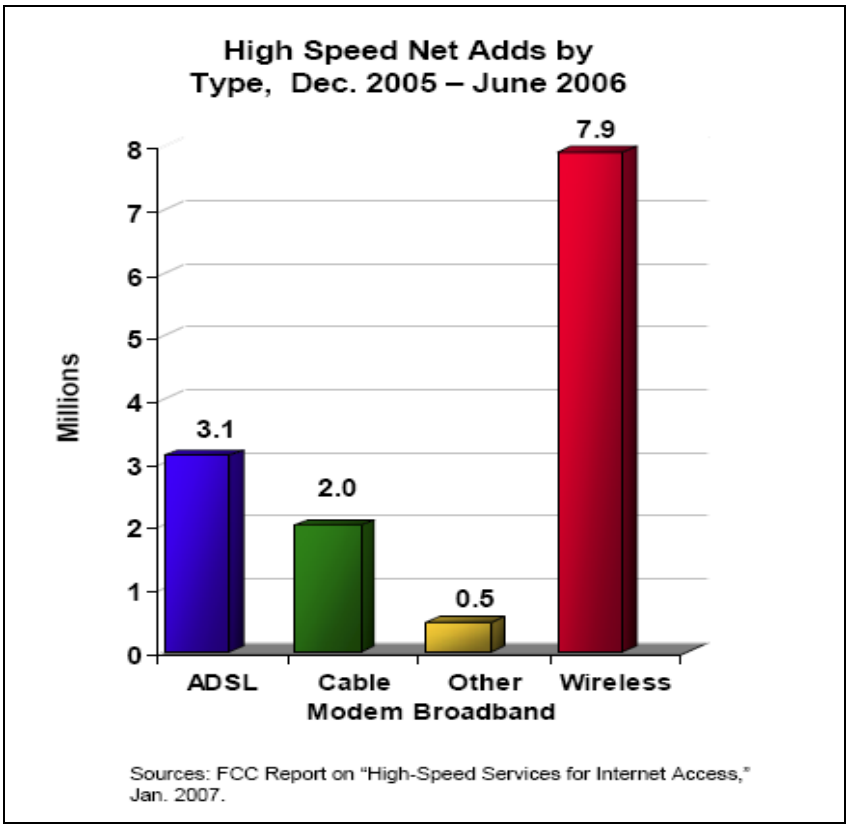
[43] *See* Scott Cleland, *America's Unique Internet Success*, Wash. Times (D.C.), Mar. 1, 2007, *available at* 2007 WLNR 3935270.

[44] Noting the distribution of broadband subscribers among different technologies (ASDL, SDSL, cable modem, traditional wireline, satellite, fixed wireless, mobile wireless, fiber, and powerline) and calculating a total of 1,323 providers of broadband access, *See* HIGH-SPEED SERVICES FOR INTERNET ACCESS: STATUS AS OF JUNE 30, 2006 at Tables 1, 8 *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-270128A1.pdf (Jan. 31, 2007).

[45] *See* Federal Trade Commission, COMMENTS OF CTIA-THE WIRELESS ASSOCIATION® IN RE BROADBAND CONNECTIVITY COMPETITION POLICY WORKSHOP – PROJECT V0700, at 5 (Feb. 28, 2007) ("*CTIA Broadband Connectivity Comments*").



Since the Commission's release of the *Eleventh Report*, next generation wireless networks continue to flourish as mobile wireless providers deploy network upgrades to rapidly expand their geographic presence to reach millions of potential subscribers. Wireless carriers in the midst of rolling out mobile broadband services are deploying an alphabet soup of wireless broadband technologies: Wi-Fi, Wi-Max, EV-DO, WCDMA, UMTS, to name a few. All four nationwide carriers are currently investing in next-generation wireless infrastructure. Companies such as Sprint Nextel and T-Mobile USA have publicly commented on their commitments to invest in the deployment of new high-speed wireless networks. Sprint Nextel pledged to spend more than $2 billion in building its 4G WiMAX network, and T-Mobile stated its intent to spend $2.7 billion in building

its HSDPA network to exploit the spectrum won in last year's Advanced Wireless Services (AWS) auction.[46]

Data on carriers' upgrades and expansion of their high-speed networks is available from their websites and the media. CTIA's filing with the Federal Trade Commission in February 2007, for example, drew upon carriers' websites to assemble a list of cities and markets in which high-speed networks were commercially operational.[47] Since then, carriers have continued to enhance their networks, broadening the availability of high-speed service to millions of Americans.[48] The following is a snapshot of some of CTIA members' current high-speed national wireless service offerings:

- **Alltel:** AxcessSM Broadband service ("Evolution – Data Only" or "EVDO") offers speeds of 400-700 kilobits per second (kbps) with maximum speeds of up to 2.4 Mbps[49]

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[46] *See* SPRINT NEXTEL ANNOUNCED 4G WIRELESS BROADBAND INITIATIVE WITH INTEL, MOTOROLA AND SAMSUNG, Sprint Nextel News Release, at http://www.2.sprint.com/mr/news-dtl.do?id=12960 (Aug. 8, 2006). *See* David Janazzo, *et al.*, T-MOBILE USA READ ACROSS: TOWERS AND ROAMERS, Merrill Lynch (Nov. 9, 2006) (noting T-Mobile spending commitment).

[47] *See CTIA Broadband Connectivity Comments*, at Appendix B: DEPLOYMENT STATUS AND BROADBAND AVAILABILITY. *See also* the communities and markets identified in press releases and in lists appearing at carrier websites - http://www.alltel.com/corporate/media/news/07/index.html (markets listed in press releases noting broadband deployment); http://www.cingular.com/coverageviewer/ (pop-up window labeled "View 3G/Mobile Broadband coverage" provides a listing of "Cities with available 3G/Mobile Broadband"); http://powervision.sprint.com/mobilebroadband/plans/coverage.html (list of cities covered by Sprint's mobile broadband network, now covering 204 million pops); and http://b2b.vzw.com/broadband/coveragearea.html (providing Broadband access speed and coverage information).

[48] *See* Kelly Hill, AT&T TO SPEED UP HSDPA, ADD DOZENS OF NEW MARKETS, RCR Wireless News (Apr. 2, 2007).

[49] *See* ALLTEL EXTENDS EVDO WIRELESS BROADBAND TO MYRTLE BEACH, HILTON HEAD AND SEVERAL INLAND SOUTH CAROLINA COMMUNITIES, Press Release *at* http://phx.corporate-ir.net/phoenix.zhtml?c=74159&p=irol-newsArticle&ID=984165&highlight= (Apr. 12, 2007).

- **AT&T Mobility/Cingular:** BroadbandConnect (High-Speed Downlink Packet Access or "HSDPA") service offers speeds of 400-700 kbps. AT&T plans to invest more than $750 million in 2007 to accelerate its global IP solutions to meet the needs of its business customers worldwide.[50]

- **Sprint Nextel:** Sprint Nextel upgraded its EVDO service in October 2006 to the EVDO Revision A ("Rev. A") network, which now reaches more than 140 million people in more than 5,400 communities. Rev. A offers upload speeds of 350-500 kbps, and average download speeds of 600 kbps-1.4 mbps (from 400-700 kbps with EVDO). Sprint plans to roll-out a WiMax network by the end of 2007.[51]

- **T-Mobile USA:** Offers mobile Internet access through its GPRS/EDGE (General Packet Radio Service / Enhanced Data for GSM Evolution) network, with a typical EDGE download speed of 100 kbps, and operates a network of more than 8,000 wireless hotspots; T-Mobile's HSDPA network is currently in deployment.

- **Verizon Wireless:** Based on CDMA EV-DO technology offering speeds of 400-700 kbps.[52] In February 2007, Verizon Wireless upgraded to EVDO Rev. A technology. BroadbandAccess customers can expect average download speeds of 600 kbps to 1.4 megabits and average upload speeds of 500-800 kbps.[53]

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[50] *See* AT&T TO INVEST $750 MILLION-PLUS GLOBALLY IN 2007 TO SPEED ADVANCED SOLUTIONS TO BUSINESS CUSTOMERS, Press Release *at* http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=23522 (Mar. 13, 2007).

[51] *See Speedy Rev. A spreads to 250 cities, 5,400 communities. (Compatible Smart Phones Available Soon from Sprint),* Apr. 2, 2007, *available at* 2007 WLNR 6859583; SPRINT LAUNCHES FASTER MOBILE BROADBAND NETWORK IN CHARLOTTE, NEWS RELEASE, Press Release *at* *http*://www2.sprint.com/mr/news_dtl.do?id=16122 (Mar. 13, 2007).

[52] *See* Verizon Wireless, BEST WIRELESS SERVICE PROVIDER *at* http://www.vzw-whoweare.com/best/leadership.asp (accessed on May 2, 2007).

[53] *See* Verizon Wireless, BEST WIRELESS SERVICE PROVIDER *at* http://www.vzw-whoweare.com/best/leadership.asp; FACTS ABOUT…VERIZON WIRELESS NETWORK *at* http://news.vzw.com/pdf/Verizon_Wireless_Press_Kit.pdf (accessed on May 2, 2007).

Deployment is not limited to nationwide wireless providers; Alaska Communications Systems, Cellular South, Midwest Wireless, Mobile Satellite Ventures, NTELOS, and many others have and continue to roll-out mobile wireless broadband services.[54] According to the National Telecommunications Cooperative Association's 2006 Wireless Survey Report, 70% of those respondents providing wireless service offer broadband data, 38% mobile voice, and 27% non-broadband data.[55] Over half of the survey respondents not currently offering wireless service are considering doing so in the future.[56]

B. Pricing Plan Innovations

Over the years, the face of the wireless industry has changed to the benefit of consumers as wireless carriers have been at the forefront of innovation with new services, market offerings and pricing plans. Today, national calling plans are available from

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[54] *See, e.g.* ACS MOBILE BROADBAND INTERNET ANYPLACE *at* http://www.acsalaska.com/Cultures/en-US/Personal/Mobile+Broadband/; WIRELESS BROADBAND FROM CELLULAR SOUTH *at* http://www.cellularsouth.com/broadband/; Wally Northway, *Cellular South opens Technical Operations Center*, 2007 WLNR 7069471 (Mar. 12, 2007); BUNDLE THE YAK WITH THE UNLIMITED BROADBAND ACCESS *at* http://www.cellularone.bm/pages/001_2.php?omenu=m00&menu=m001_2; Midwest Wireless, HIGH-SPEED INTERNET *at* http://www.midwestwireless.com/Home/InternetMore/HighSpeedInternet/Default.htm; MOBILE SATELLITE VENTURES (MSV) ISSUED KEY PATENT IN BROADBAND MULTI-SPOTBEAN SATELLITE SYSTEMS *at* http://www.msvlp.com/media/press-releases-view.cfm?id=74; *Mobile Satellite Ventures to offer satellite-based broadband*, 2007 WLNR 7220775 (Apr. 6, 2007); Why share your bandwidth with all your neighbors? *at* http://www.ntelos.com/landline/residential/broadband.html.

[55] National Telecommunications Cooperative Association, NTCA 2006 WIRELESS SURVEY REPORT 3, 6 (Fig. 2) *at* http://www.ntca.org/content_documents/2006NTCAWirelessSurveyReport.pdf (January 2007).

[56] *See id.* at 3, 7.

providers of all sizes, including not only the four largest providers, but also regional and much smaller wireless service providers such as U.S. Cellular.[57] In addition to facilities-based licensees, MVNOs also offer nationwide calling plans.[58]

Plan prices fell following rate deregulation and the entry of PCS competition in 1996.[59] Cellular and PCS companies experimented with the bundling of low-cost minutes, offering inexpensive mobility wireline substitution plans, and prepaid service.[60] Other carriers began to follow suit accelerating pricing innovations by testing new pricing structures and incentives in an effort to garner market share. In 1997, some PCS plans offered the "first incoming minute free."[61] AT&T addressed roaming charges when it

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[57] *See* U.S. Cellular National Calling Plans *at* http://www.uscc.com/uscellular/SilverStream/Pages/b_plan.html?mkt=606730&zip=62601&tm=0&p=3.

[58] *See*, *e.g.*, Quest Wireless® National 500 Plan *at* https://shop.qwest.com/en/US/wireless/service?cmd=QW_PlansList&marketSegment=RES&selectedPlanForDetail=10001405&planPrice=39.9900000000&category=INDV.

[59] *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Third Report, 13 FCC Rcd 19746,19766 (1998); *See also* Elizabeth V. Mooney, "Prices down 6 percent as PCS and cellular fight for customers," *RCR News*, Dec. 1, 1997 at p.23 (noting average decline of six percent, with "some carriers slashing prices by more than a third" as "PCS operators are moving quickly into metropolitan areas, offering very attractive rates and significant long-term promotions to try to capture enough market share to turn a profit, according to Kagan Associates. In response, many cellular carriers are loading more minutes into their rate plans, slashing roaming rates and accelerating digital offerings.").

[60] *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, THIRD REPORT, 13 FCC Rcd 19746,19771 (1998).

[61] *See* "Sprint PCS Launches Advanced Wireless Service in San Diego," Press Release, Dec. 27, 1996, *available at* http://www.qualcomm.com/press/releases/1996/press579.html (last accessed Apr. 17, 2007) (announcing the terms to be offered in Sprint PCS' markets in 1997, including "The first minute of incoming calls is free in customers' home service areas.").

launched its Digital One Rate Plan in 1998. Competitors then began introducing national and regional One Rate-like plans.[62] A number of providers unveiled competing Family Plans in 1999, while others marketed plans with periods of unlimited use.[63]

In the year 2000, Leap Wireless, U.S. Cellular, and Alltel were offering or experimenting with unlimited flat-rate local calling plans.[64] The year 2001 yielded Free Nights and Weekends plans and then in 2002 rival competitors launched "On-Net" calling plans.[65] Unlimited calling plans became popular with customers and unlimited "in-network" calling plans were expanded in 2004 to respond to consumer demand. An increasing segment of the market unable or unwilling to sign a post-paid wireless contract

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62 *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Fourth Report, 14 FCC Rcd 10145, 10155-56 (1999); *See also, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Sixth Report, 16 FCC Rcd 13350, 13377-78 (2001); *and* "Long Distance: Sprint PCS Unveils All-Inclusive Nationwide Service Plans with Prices as Low as a Dime a Minute, Anytime, Anywhere," *Edge*, Oct. 5, 1998, *available at* http://findarticles.com/p/articles/mi_m0UNZ/is_1998_Oct_5/ai_53058236 (noting nationwide calling plans, and first incoming minute free practice).

63 *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Fifth Report, 15 FCC Rcd 17660, 17676 (2000) (noting introduction by AT&T in the third quarter of 1999, and SBC's introduction of its "FamilyTalk" plan); *See also, Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Tenth Report, 20 FCC Rcd 15908, 15946 (2005) (noting that "Since 2003, U.S. providers have stepped up efforts to take on more customers through 'family plan' packages.").

64 *See* Sixth Report, 16 FCC Rcd at 13382-83.

65 Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, Eighth Report, 18 FCC Rcd 14783 (2003) at 14828-29 (noting on-net calling plans' introduction by Verizon Wireless, AT&T Wireless, and Cingular in 2002, and distinguishing them from Digital One-Rate type plans).

spurred the launch or re-launch of prepaid service offerings.[66] Most recently in 2006, wireless providers introduced "Mobile to Anyone" calling plans that allow customers to choose a fixed number of "friends" to whom the subscriber could make unlimited calls, day or night, even to friends subscribing to a competitor.[67] Pricing innovation also continues in areas other than voice. For example, in April 2007, Verizon Wireless introduced a number of messaging options that incorporate unlimited text, picture, video messaging and instant messaging to anyone on any network in the U.S.[68]

In fact, wireless companies have continued to experiment with calling plans as they respond to marketplace competition and seek to distinguish themselves, launching new offerings, expanding calling plans, trialing and discontinuing or re-focusing their marketing of services and features.[69] Thus, for example, AT&T Mobility, Sprint Nextel,

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66 *See e.g.*, Ninth Report, 19 FCC Rcd at 20645-46 (re expansion of in-network or mobile-to-mobile calling in early 2004); *see also* Tenth Report, 20 FCC Rcd at 15946-47 at ¶¶. 99-100 and n.223 (re: prepaid launches and re-launches).

67 FCC Competition Report at ¶ 91 (noting Alltel and SunCom offerings); *see also* T-Mobile introduces any-network calling™ *at* http://www.t-mobile.com/templates/generic.aspx?passet=Pln_Lst_MyFavesLrnDemo; myCircle *at* http://www.alltel.com/all4you/; SunCom Mobile-to-Anyone *at* http://www.suncom.com/features/mobile_to_anyone.html.

68 *See* MORE MESSAGES MEAN MORE VALUE AS VERIZON WIRELESS INTRODUCES UNLIMITED TEXT, PICTURE, Video and Instant Messaging to Anyone in the U.S. *at* http://news.vzw.com/news/2007/04/pr2007-04-16.html; Kelly Hill, VERIZON WIRELESS CONFRONTS RIVALS WITH UNLIMITED MESSAGING SERVICE, RCR News, *at* http://www.rcrnews.com/apps/pbcs.dll/article?AID=/20070416/FREE/70416003/1002/SUB (Apr. 17, 2007).

69 *See, e.g.*, Kelly Hill, AT&T DEBUTS 'UNITY' PLANS TO EXTEND WIRELESS IN-NETWORK CALLING TO WIRELINE NUMBERS, RCR Wireless News, *at* http://www.rcrnews.com/apps/pbcs.dll/article?AID=/20070119/FREE/70119001/1002/alln (Jan. 19, 2007); Sprint Tests Unlimited Cellular Call Service Plan, Associated Press *at* http://www.detnews.com/apps/pbcs.dll/article?AID=/20070317/BIZ/703170340 (Mar. 17, 2007) (reporting on Sprint Nextel's testing of a new plan in the San Francisco area that features unlimited call time, text messages and wireless Internet access); Kelly Hill,

and Verizon Wireless have all offered unlimited messaging options in some areas.[70] Revol Wireless began trialing an advertisement-supported mobile service that gives users a discount on their monthly bills if they agree to receive content, advertising and promotional offers on their phones.[71] Data-oriented experimentation has involved price points, calling options, additional features, and user interfaces.[72] Recent innovations have included daily access and weekly payment plans from Alltel and Leap Wireless.[73]

SPRINT NEXTEL CONTEMPLATING LEAP, METROPCS COMPETITOR, RCR Wireless News, *at* http://www.rcrnews.com/apps/pbcs.dll/article?AID=/20070110/FREE/70110007/1001/FREE (Jan. 10, 20007).

[70] *See* Thumbs Up! AT&T Announces Unlimited Messaging Plans *at* http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=23733 (Apr. 25, 2007); Sprint/Nextel Text Messaging More Affordable *at* http://www.phonedog.com/cell-phone-research/news/sprint-nextel-text-messaging-more-affordable.aspx (Feb. 4, 2007); Kelly Hill, VZW UNVEILS UNLIMITED MESSAGING PLANS, RCR Wireless News at p.4 (Apr. 23, 2007). *See also* Kelly Hill, LEAP STRIKES BACK, CARRIER COUNTERS WITH UNLIMITED MESSAGING, RCR Wireless News at p.9 (Apr. 9, 2007.

[71] *See* REVOL WIRELESS SUBSCRIBERS BECOME THE FIRST IN THE U.S. TO RECEIVE TOP LEVEL MOBILE ADVERTSING, Mobile Posse *at* http://www.mobileposse.com/pressreleases/revol_subsribers_mobile_ad.html (Mar.15, 2007).

[72] *See* Kelly Hill, CARRIERS TOY WITH PACKAGES TO SPUR DATA UPTAKE, RCR Wireless News, at p.15 (Apr. 23, 2007) (noting premier and business-focused data options, and international traveler, and audiophile-oriented appeals). *See also* ALLTEL EXPANDS SMARTPHONE CALLING PLANS, FierceWireless.com (Apr. 12, 2007); SPRINT NEXTEL JUGGLES TEXT PLANS, RCR Wireless News, at p.4 (Feb. 4, 2007). *See* Kelly Hill, ALLTEL'S NEW UI AIMS FOR SIMPLE NAVIGATION, RCR Wireless News, at p.3 (Jan. 22, 2007) (noting Alltel and T-Mobile USA's "innovation volley" of myCircle and myFaves, and the Alltel CellTop interface).

[73] *See* Eric Zeman, ALLTEL OFFERS ONE-DAY PASS FOR MOBILE INTERNET, Informationweek, *at* http://www.informationweek.com/blog/main/archives/2007/05/alltel_bows_one.html (May 1, 2007); and *see* Dan Meyer, LEAP OFFERS WEEKLY CRICKET SERVICE, RCR Wireless News, *at* http://www.rcrnews.com/apps/pbcs.dll/article?AID=/20070424/FREE/7042001/1002&te (Apr. 26, 2007).

C. Handset Pricing Trends

Consumers benefit from the wireless industry's robust competition across a broad array of factors – from the price of service, to a variety of service options and packages, the quality of service, coverage areas, and the features and functions (and prices) of handsets and other devices (including wireless-enabled Personal Digital Assistants – "PDAs" – and aircards enabling wireless connectivity for laptops).[74] Once nothing more than a means to make phone calls, handsets available today feature many improvements over their predecessors, including improved battery life and slim lightweight design. Moreover, the wireless industry has become a platform to deliver a rich suite of enhanced multimedia features, including cameras, Internet-based applications, text messaging, ring tones, MP3 players and games.[75] Yet, as District Judge Denise Cote of the U.S. District Court of the Southern District of New York observed, "[e]ven as handsets have become increasingly more sophisticated, the costs of handsets have dropped."[76]

Review of wireless service providers' and third-party retailers' websites reveals the extent to which wireless consumers have a broad variety of service options and devices available to them. There are literally hundreds of wireless devices available to consumers directly from service providers, and hundreds which are available to them

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[74] *See CTIA Skype Comments* at 17-18.

[75] *See* Sean Buckley, DRIVING WIRELESS COMPETITION (PART I OF II) *at* *http://www.telecommagazine.com/newsglobe/article.asp?HH_ID=AR_3120* (Apr. 20, 2007).

[76] *In re* Wireless Telephone Service Antitrust Litigation, Opinion and Order, 02 Civ. 2637, at p. 11 (S.D.N.Y. filed Aug. 29, 2005).

from either service providers or third-party retailers (including manufacturers).[77] With more than 800 mobile phone and devices on the U.S. market, from nearly three dozen manufacturers, wireless carriers clearly make every effort to deliver the handset features that consumers desire.[78]

Information about handsets – and links through which they may be ordered, either with or without service – is available on more than 134 carriers' websites, as well as third-party websites operated by Amazon, Best Buy, Cell Crew, CNET, Mobiledia, MountainWireless.com, MyRatePlan.com, PhoneScoop, 1-800-Mobiles, Wal-Mart, Target and other retailers.[79] These websites demonstrate the broad range of handsets available to consumers, and that popular handsets are available from carriers of all sizes. For example, variations on the RAZR and KRZR phones are available from national carriers such as AT&T, Sprint Nextel, T-Mobile, and Verizon Wireless – and from super-regional and regional carriers such as Alltel, MetroPCS, SunCom, Unicel, and U.S. Cellular – as well as from smaller service providers such as Cellcom, Corr Wireless, Hargray Wireless, Viaero Wireless, and WestLink Communications.[80] (The websites of

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77 *See CTIA Skype Comments* at p.17.

78 *See Verizon Wireless Skype Comments* at 11.

79 *See, e.g.*, Mobiledia at http://www.mobiledia.com/; PhoneScoop *at* http://www.phonescoop.com/phones/ (where phones may be accessed by manufacturer, or searched for by feature). See also Mountain Wireless, at www.mountainwireless.com,

80 *See* PhoneScoop at http://www.phonescoop.com/phones/phone.php?p=953 (noting availability of RAZR V3m from Alltel, Amp'd, MetroPCS, Sprint, U.S. Cellular, and Verizon), and http://www.phonescoop.com/phones/phone.php?p=1007 (noting availability of KRZR K1 from AT&T, Cellular One / Dobson, SunCom, and T-Mobile). See also company websites showing the broad variety of wireless phones offered by carriers of all sizes, including Alltel (http://www.alltel.com/business/wireless/phones/); AT&T Mobility (http://www.cingular.com/cell-phone-service/cell-phones/index.jsp); Alaska Communications Systems (http://www.acsalaska.com/Cultures/en-

a number of service providers also include zip code or map selection features which generate device and service options by market.[81])

Information about the availability of these handsets, and their features, is abundantly available from public sources, including not only the carriers' websites, but also trade and general interest publications as well as the through the media. For example, the sharp growth in smartphone sales can be credited to national advertising programs that raise public awareness by highlighting the widening field of thinner, more stylish phones.[82] Notably, RCR Wireless News ("RCR") has tracked handset competition among the top four carriers and has published a dynamic tracker of handset

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US/Personal/Wireless/Phones+Plans+Services/; Bluegrass Cellular (http://www.mybluebrew.com/phonemodels.asp); Cellcom (http://www.cellcom.com/products/index.php); http://www.corrwireless.com/default.aspx?id=5); Hargray Wireless (http://www.hargray.com/wireless/phones.php); MetroPCS (http://www.metropcs.com/phones.php); NTELOS (http://www.ntelos.com/wireless/phones/phones_landing.html); Pioneer Telephone (http://www.ptci.com/Main.php?do=lob_prods&cat=R&lob=wireless&ptype=D); Revol Wireless (http://www.revol.us/revophones/); Sprint Nextel (http://www.sprint.com/index.html); SRT Communications (http://www.srt.com/products/wireless/showcase.html); T-Mobile USA (http://www.t-mobile.com/shop/phones/Default.aspx?compatable=false); Unicel (http://www.unicel.com/shop/phones/); Verizon Wireless (http://www.verizonwireless.com/b2c/store/controller?item=phoneFirst&action=viewPhoneOverviewByDevice&deviceType=Phones&sortOption=priceSort); Viaero Wireless (http://www.viaero.com/Pages/Phones/); WestLink Communications (http://www.westlinkcom.com/perfect.htm) (four largest carriers' websites accessed May 2, 2007, all others accessed April 27, 2007).

[81] *See*, *e.g.*, Sprint Coverage Information *at* http://www1.sprintpcs.com/explore/coverage/PhoneZipEntry.jsp?ATR_ExtraOne=UHP_PCS_Phones&FOLDER%3C%3Efolder_id=1657475&CURRENT_USER%3C%3EATR_SCID=ECOMM&CURRENT_USER%3C%3EATR_PCode=None&CURRENT_USER%3C%3EATR_cartState=group.

[82] *See* Matt Kapko, SMARTPHONES MOVE BEYOND 'NERD BRANDING, RCR Wireless News, at p.9 (Mar. 12, 2007).

pricing changes on a weekly basis. Attachment A reproduces a selection of these handset tracking reports from the first few months of 2007. RCR has provided extensive coverage of the changes in the handset market, from pricing of handsets, to the offering of new handsets with new features, or the potential impact of new entrants in the handset market.[83]

[83] *See* Phil Carson, BLACKBERRY PRICES DROP AT AT&T, U.S. CELLULAR, RCR Wireless News, *at* http://www.rcrnews.com/apps/pbcs.dll/article?AID=/20070501/FREE/70501013/1016/FREE (May 1, 2007); Phil Carson, POST-HOLIDAY HANDSET PRICES WAVER, RCR Wireless News, at p.4 (Jan. 8, 2007); Phil Carson, CHEAPER SMARTPHONES HIT ALLTEL, T-MOBILE USA, RCR Wireless News, at p.4 (Apr. 23, 2007); Phil Carson, SPRINT NEXTEL SLASHES PRICE ON CDMA/IDEN BLEND PHONE, RCR Wireless News, at p.4 (Feb. 5, 2007); LG MUSIC PHONE HITS ALLTEL, RCR Wireless News, at p.4 (Mar. 19, 2007; Phil Carson, SPRINT NEXTEL ADDS TO PHONE LINEUP, FIDDLES WITH SMARTPHONE PRICING, RCR Wireless News, at p.4 (Feb. 26, 2007). *See also* Phil Carson, CINGULAR, VZW DROP KIDDY PHONES, RCR Wireless News, at p.4 (Apr. 16, 2007); Phil Carson, VERIZON WIRELESS BUYS SAMSUNG'S DUAL APPROACH TO MESSAGING, RCR Wireless News, at p.5 (Feb. 26, 2007. *See* Phil Carson, IPHONE INKBLOT CAUSES WIRELESS TIZZY: INDUSTRY PLAYERS REVEAL BEMUSEMENT, FEAR AND NEW IDEAS, RCR Wireless News, at p.8 (Feb. 5, 2007); Phil Carson, IPHONE COULD DISRUPT, IF PRICE IS RIGHT: CONSUMER SURVEY SAYS $300 OR LESS COULD CAUSE CHURN, RCR Wireless News, at p.14 (Feb. 26, 2007).

CONCLUSION

With multiple service providers serving the vast majority of Americans, the on-going investment in and roll-out of advanced wireless services, the continuing introduction of innovative service options and enhanced mobile devices, declining prices, and increasing usage by consumers, the wireless industry – and the wireless marketplace – is clearly delivering effective competition, and competitive benefits, to consumers. Indeed, wireless competition is delivering tremendous benefits for consumers and the economy.

CTIA hopes that the information provided in these comments assists the Commission in preparing its *Twelfth Annual CMRS Competition Report*.

Respectfully submitted,

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